

Subject: Proposed Critical Habitat for Southern Resident

From: "Lifeforce Foundation" <lifeforcesociety@hotmail.com>

Date: Sun, 9 Jul 2006 11:44:38 -0700

To: "Lifeforce Foundation" <lifeforcesociety@hotmail.com>, <orcahabitat.nwr@noaa.gov>, <Bob.Lohn@noaa.gov>

To: Chief of Protected Resources and Bob Lohn

Orcahabitat.nwr@noaa.gov

From: Peter Hamilton, Lifeforce Foundation, lifeforcesociety@hotmail.com

Re: Proposed Critical Habitat for Southern Resident Killer Whales

1. Distribution of the Southern Community

Lifeforce has studied the behaviour and travel patterns of the Southern Community for over 10 years. As part of this work I have looked at important critical habitats. This would include Pt. Grey to Boundary Bay to White Rock (with Birch Bay to Rosario Strait in US) and Bowen Island to Porlier and Gabriola Passes (with Boundary Pass in the US). In 2005 and 2006 the Southern Community have spent more time in waters from Pt. Grey to Rosario and, sometimes, Boundary Pass. They are turning more often to stay in these areas. In 2005 they past Pt. Roberts 4 times on two different days. They are spending time for all of their life activities such as foraging, resting and socializing. We have not published our data in order to give the orcas a break from Whale Watch Companies, Pleasure Boaters and some Research Vessels. We can supply data to support our recommendations that these areas be included as "critical habitats".

2. Threats

Oil and Chemical Spills

Lifeforce has been developing methods to attract orcas away from environmental hazards. In addition to much needed Oil Spill Response Plans, this area should be a priority "critical habitat" since the Southern Community has already been exposed to oil spills off Cherry Point, WA.

Please see Lifeforce's "Oil and Chemical Resistant Whales, Otters and Birds?".

Whale Watching

Boat traffic monitoring is very important. The Lifeforce "Lifewatch Boater Awareness Program" has covered these areas except in 2006 as funding was not available. We continue to provide a Whale and Dolphin Hotline and provide guidelines in these areas for the over 13 years.

For further information about No Whale Watch Zones, Whale Watch Zones and other recommendations that can be applied to critical habitat issues please see Lifeforce's "A Model Whale Watching Plan for Endangered Orcas" and "Marine Mammal Regulatory Amendments and Management Plans".

Permit Close Approaches

No activity that interrupts the lifestyles and/or cause stress and pain should be permitted in critical habitats. This would include attachment of instruments and biological sampling.

Alternatives to prey sampling must be implanted to stop haphazard close approaches. Sometimes the behaviour is socializing not foraging that is broken up by boats speeding in on them or conducting "focal follows"..

Commercial Photographers

There is an abundance of orca photos available and further close approaches should be prohibited in critical habitats.

"Research" Photographers and Research Activities

The amount of time spent, duplication and other methods to obtain census (such as land base counts) should be evaluated when permitting ID photos. Organizations purporting to be "research" when they are conducting whale watch tours should not be allowed to do close approaches in critical habitats.

There are three research projects that involve close approaches or "focal follows". This adds to the know threat of stress/injury and constant interruption of the orcas' lifestyles due to boat traffic.

3. Action Planning

1. Actions should include developing responses to environmental hazards such as oil and chemical spills.
2. The dumping of raw sewage by Victoria must be stopped. The sewage contains PCBs and many more contaminants. The sewage is dumped into the identified critical habitat for the Southern Community and transients.
3. Vancouver sewage treatment must be improved. Presently low-level treatment of sewage is being release into orcas' critical habitat at the Iona Beach Jetty.
4. Commercial fisheries must be "educated". For example crab boats off Sturgeon Banks should shut down when orcas are present. They do not follow the guidelines.
5. Delta Container Port expansion plans will impact on the orcas' critical habitat. Their present cargo ships should not dock when orcas are passing.
6. Westshore Terminals boat traffic should not dock when orcas are present. They must not empty their bilges that could include oil and other pollutants.
7. Cherry Point traffic should not dock when orcas are present.
8. Active Pass should be closed to commercial whale watching. When possible, BC Ferries should wait until the orcas have left Active Pass before entering.

Oil and Chemical Resistant Whales Final.pdf
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ModelWhaleWatchPlan.pdf

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MarineMammalRegulationsFinal.pdf

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NEWS RELEASE
Immediate Release
February 10, 2003

Re: Strong Regulations Needed to Protect Orcas and Other Marine Mammals

Fisheries and Oceans Canada (DFO) is proposing to amend the existing Marine Mammal Regulations to ensure that everyone clearly understand their responsibilities to help protect marine mammals. The present regulations do prohibit the disturbance of marine mammals (such as whales, dolphins, seals and sea otters) but they are too general and do not clearly inform the public about unacceptable acts when viewing marine wildlife.

"DFO should be fully supported for their efforts to implement strong regulations," stated Peter Hamilton, Lifeforce Founder, "They are protecting whales for present and future generations to be able to appreciate and enjoy,"

Lifeforce has been conducting Marine Life Programs for over 10 years. Our Lifewatch Boater Awareness Program is a stewardship program providing information about Whale Watching Guidelines and Regulations to boaters on the water and through boater training courses etc.. We monitor the activities of pleasure and commercial marine mammal viewers.

We also have a Marine Wildlife Hotline and a Marine Wildlife Rescue service. These are free services for the public to report injuries, stranding and harassment (604-NOW HOPE (669-4673)).

Lifeforce has operated under a DFO Research permit to study the behaviour and travel patterns of the Southern Orca Community. We have urged governments to designate some orca populations as endangered. We are presently developing an Orca Trails Program to promote land based whale watching by advising park managers when orcas will pass by their marine parks.

Lifeforce had hoped that whale watch businesses would act responsibly and that they would help protect endangered species such as the Southern Orca Community. However, many of the companies do not adhere to the guidelines and this constitutes harassment. In addition, although the uncontrolled number of pleasure boats usually will adhere to guideline when advised, there must be an increase in education programs to advise non-commercial boaters.

Lifeforce will be submitting a full report to DFO. Our recommendations for Regulatory Amendments will include: "It is through responsible stewardship activities and strong regulations that whales and marine environments will be protected," added Peter Hamilton. "It is hoped that individuals and businesses will take action toward this cultural and economic benefit."

Community Meetings started January 8th and the Vancouver meeting will be held on February 11, 2003, 6 - 9 PM, Vancouver Aquarium.

For further information:

Lifeforce at (604) 669-4673 or lifeforcesociety@hotmail.com

DFO at www.comm.pac.dfo-mpo.gc.ca

DRAFT

Marine Mammal Regulatory Amendments and Management Plans



Whale watch companies continue to leap frog and block the orcas' pathways.
Boat traffic is recognized as a threat to their survival because it interrupts their lifestyles
Resulting in physical and psychological pain.

February, 2003
Lifeforce Foundation
lifeforcesociety@hotmail.com

Marine Mammal Regulatory Amendments and Management Plans

Introduction

DFO should be fully supported for their efforts to implement strong regulations. You are protecting whales for present and future generations to be able to appreciate and enjoy.

Lifeforce has been conducting Marine Life Programs for over 10 years. Our Lifewatch Boater Awareness Program is a stewardship program providing information about Whale Watching Guidelines and Regulations to boaters on the water and through boater training courses etc.. We monitor the activities of pleasure and commercial marine mammal viewers.

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Regulatory Amendments and Management Plans

Some of the Lifeforce recommendations may not be suitable for Regulatory Amendments but should be included in operating policies.

Standard Operating Procedure

Lifeforce recommendations for Regulatory Amendments and for Management Plans include:

1. That Whale Watch Companies and other related ecotourism businesses (including companies using aircraft) must pass a compulsory written test in order to receive an annual License/Permit to Operate. Inspections will determine if they are in violation of permits and are subject to suspension or cancellation.
All staff must be trained. Training should include safe boating competency testing and marine wildlife behavior knowledge. Educational material should include Lifeforce's Orca Field Guide.
All companies must provide Weekly Marine Wildlife Reports. This would include information from the number of trips to species encountered.
Whale Watch Companies will display an Ethical Certificate of Operation. This seal of approval would appropriately be a "Whale of Approval"

Background:

Lifeforce has found that if boat operators understood basic behaviours and orca "hot spots" (high levels of activity) they would realize that there is no need to approach close, "reposition" and continuously pursue. The Lifeforce Orca Field Guide has been and could continue to be used to educate operators about orca behaviours and to safely operate a boat.

For pleasure craft owners Lifeforce has been distributing educational material to boat training/certificate programs such as Sail and Power Squadron and the Lifesaving Society.

Lifeforce found Harbor Air landing in the middle of a traveling pod and when the orcas passed the seaplane "jumped" over to another pod.

The National Parks and National Historic Sites of Canada has looked at Marine Wildlife Viewing Guidelines for Business licensing in Pacific Rim National Park Reserve.

"Pacific Rim National Park Reserve (PRNPR) – Marine Wildlife Viewing Guidelines", January 23, 2003, states that under the Canada National Park Act Business Regulations s all businesses operating in the Reserve require business licenses. The principles forming the basics of licensing standards include "maintain ecological and cultural integrity and conform to policy and legislation." The present wildlife viewing guidelines will become conditions of use for business licenses in 2003.

The UVIC Marine Mammal Interaction Workshop (April 1999) recommended to "Develop an intensive campaign for training commercial operators and public boat operators in matters of safety and behaviour around marine mammals.

In the "Whale Watching in Hervey Bay Interpretive Notes" (Queensland Dept of Environment and Heritage, Australia) there is a section determining policies to apply to the issue of permits for the conduct of tourist permits. They recommended that an Advisory Committee would include persons experienced with whale watching (monitoring and operating), persons experienced in conservation and management, persons with scientific knowledge and their city council (for public input).

The Hervey Bay Marine Park Regulations (1990) includes a detailed Permit application for boat operators. The "Conditions of Permission" includes a Weekly Data Form to include information ranging from the number of trips to encounters with marine wildlife.

Marine Activities in the Saguenay – St. Lawrence Marine Park Regulations has sections on Applications for Permits, Inspections and Suspension and Cancellation of Permits.

The International Association of Antarctica Tour Operators have a Marine Wildlife Watching Guidelines (Whales and Dolphins, Seals and Seabirds) for Vessel and Zodiac Operations. They say that "Identifying and, in many cases, recording species for trip log purposes is part of most onboard naturalist's remit. Logs, which include this data and the Latitude and Longitude of sightings, are immense value. "

Great Barrier Reef Marine Park Authority (GBRMPA) has developed Codes of Practices based on "the precautionary principle to substantially reduce the adverse effects of human activities on whales and dolphins".

Fundelfin (a Costa Rica organization attempting to create a South Pacific Tropical Marine Sanctuary) supports a well-monitored certification program – "a dolphin seal of approval".

Fundelfin has Dolphin and Whale Interaction Guidelines. Their staff has a combined 30 years experience states "It is imperative that people educate themselves about the habits and behaviours of whales and dolphins. Ignorance about their biological and physiological aspects and life patterns can and does affect them adversely."

2. Commercial and recreational vessels must be restricted by both number of boats and time allowed on scene. In addition, when pleasure boats are present commercial vessels must stand down until the pleasure craft can be advised of this safe boat operating procedures. They would be advised by organizations conducting monitoring.

Background:

Lifeforce has found that the present no limits on boat activity presents an unmanageable situation for monitoring groups to advise of the present Whale Watch Guidelines and Regulations. With numbers that could average approx. 20 boats at any given time (in high peak areas) it can be impossible to safely operate without risk of mental or physical injury to orcas.

Up to 50 vessels have been observed viewing orcas at any one time with a high of approx. 94 boats.

PRNPR defines a "close viewing zones" as 100 – 200 meters for orcas and while one boat occupies it all other vessels should wait outside of this zone.

East Coast operating guidelines restrict the number of whale watch boats and have implemented time limits.

Fundelfin recommends no more than two boats be within recommended zones at any given time.

GBRMPA states that The Whale Protection Act 1980 does cover "General conditions for the protection of whale" in Section 40. This includes that a person must not cause or permit a vessel to:

- (b) to approach within 300 meters of any whale when 3 or more vessels are within 300 meters.
- (e) to separate a whale from a group or come between a mother and calf.

3. New Boat Operations Restrictions should include such stipulations that boaters must not impede travel routes, must stay parallel with engines off, must stay on the outer perimeter and maintain a distance of at least 400 meters.

Operating Procedures in the present guidelines should be incorporated into the new regulations.

Any new regulations should look at stronger specific species and site protection and the regulations should apply equally to all marine mammals because exposure to human threats affects all individuals.

Background:

Lifeforce has found that Whale Watch operators do not follow the above safe operating procedures. They often play semantics by trying to call their leapfrogging as "repositioning". Adverse reactions by orcas to inappropriate boat operations has been observed and documented by Lifeforce to support the above recommendations.

Lifeforce has found that when operators have followed our advice it has been a less stressful time for the orca and an enjoyable time for whale watchers.

For approximately eight years Lifeforce has provided Whale Watch Guidelines to the public and companies. Monitoring groups, such as Lifeforce's Lifewatch, Soundwatch, M3 and Straitwatch has discussed various problems and this information has helped revised guidelines.

Although there should be special recognition of endangered species, in general, the regulations should decrease protection standards to any species because it does not matter if they are endangered or in abundance since they all suffer equally when subjected to human threats. Noise, pollution, degradation of habitats and so on are threats that every individual marine mammal is affected by. If the regulations are not applied equally then any reduced levels of protection could contribute the decline in their present population status.

Special consideration should be given for the protection of mothers with babies. "No Approach Zones" should be implemented.

PRNPR states "All boats on one side". Their policy includes species and site specific guidelines. They also have special instructions ("On Site Etiquette") for watching Transient and Resident orcas.

PRNPR also has excellent Principles of Wildlife Viewing.

GBRMPA defines harassment as "disturbing them by altering their normal patterns of behavior or activity". This can be deliberate or inadvertent.

In Australia, The Whale Protection Act 1980 and the Environment Protection and Biodiversity Conservation Act 1999 generally prohibit interfering with cetaceans, which is defined to include harassing, chasing and herding. The Queensland Nature Conservation (Whales and dolphins) Conservation Plan 1997 and supporting management program has an explicit aim to minimize harm and distress to whales and dolphins caused by human activities.

In the GBRMPA Whale and Dolphin Conservation Policy there is information about noise effects on cetaceans that we recommend be reviewed by DFO

Dr. Jon Lien, Newfoundland's Memorial University, stated, "To survive a marine mammal must rest, forage, feed, communicate and socialize with its group, mate and care for young." He states that there is evidence that the presence of whale watching vessels changes the behavior of targeted animals and these disruptions may interrupt or prevent the above important life processes.

General Principles for Whale Watching Agreed by the IWC Scientific Committee addresses the following:

1. Manage the development of Whale watching to minimize the risk of adverse impacts.
2. Design, maintain and operate platforms to minimize the risk of adverse effects on cetaceans, including disturbance from noise.
3. Allow the cetaceans to control the nature and duration of "interactions"

The International Association of Antarctica Tour Operators refer in their Guidelines to "Current International Regulations on recommended Minimum Approaches" by boats. They look at Argentina & Brazil, South Africa, Australia, New Zealand, USA and Canada. They also report on allowed Aircraft distances in various countries.

4. All commercial boats should maintain VHF radio contact in order to be advised of safe operating procedures and to advise of any inappropriate behaviour to organizations conducting education/monitoring activities.

Background:

Lifeforce has had difficulty in getting responses from the "controlled" group of commercial whale watch boats

There will always be a problem with pleasure boats because we do not know their call signs. If pleasure boats operators are aware of Whale Watch Company's stations this could lead to an increase of boat traffic.

PRNPR discuss VHF 18A (or 63A, 65A or 80A). They state that it is not acceptable to switch up or down one to relay a brief message.

Conversations should not be in secret to avoid detection of violations of regulations.

5. A moratorium should be implemented on all invasive experiments on endangered marine mammals, such as the Southern Orca Community. Non-invasive research, such as behaviour and boat interaction studies, would be allowed under special circumstances. In order to avoid duplication of studies Canadian and US permitting program should be coordinated.

Background:

Lifeforce has voiced concern over the skin biopsies and tests involving sound.

Recently, it has been proven that certain sounds can kill whales.

When orcas are continuously pursued for skin biopsies, tagging and attachment of video cameras the stress levels are significantly higher and adverse reactions have been recorded. This includes quivering – a sign of fear.

6. All research/filming permits applications should be reviewed by a Marine Mammal Animal Care Committee and subject to a 30 day Public Consultation Period.

All research/filming permits applications should be submitted to a Stage 1 Review by a Marine Mammal Animal Care Committee comprised of representatives from whale protection organizations. The MMACC will decide if the application should proceed to a Stage 2 Review by a 30-day public comment period. The MMACC

will conduct a Stage 3 Review of all Public comment to determine if a permit shall be issued.

Background:

Lifeforce has found that research conducted on transboundary species such as orcas may only have permits from one country but may venture into waters of the country that has not issued any permit.

We have also found that certain organizations may make close approaches to orcas not display a "Research Vessel" sign.

In July 2002, researchers attached tags and a video camera for a continuous 10-day period. They conducted the foraging study on the endangered Southern Community. Joint scientific and public opinion should be allowed in Canada and the US in order to protect these orcas.

PRNPR - Onsite etiquette protocol states that Research Vessels must be clearly marked – and identify business on it. If any "research" vessel is carrying more than 2 paying customers they should follow whale watch operator regulations.

The UVIC Marine Mammal Interaction Workshop (April 1999) recommended "Develop research protocols and processes to maintain healthy environments and protect marine mammals in the province."

PRNPR – They recommend the formation of a local Marine Wildlife Viewing Council.

7. a) In order to receive a Filming Permit all filming activities must include the presence of person(s) with experience and knowledge of the behavioural and travel of the species to be filmed.
b) There should be a coordinated Canadian and US permitting to prevent unacceptable high levels of intervention.

Background:

Lifeforce has found filmmakers chasing and "funnelling" orcas continuously without any understanding of their behavioural needs.

For example, well-known whale people were approaching orcas within 10 feet to get those close-ups and payment. This not only constitutes harassment but also sets a bad example for the public who view these close up encounters. Common sense does not always prevail so these types of actions must be regulated.

8. Environmental Reviews of Military Operations and Weapons/Sonar Testing; Oil and Gas Exploration/Construction; fish farms and other major activities with the potential of significant environmental impacts must be mandated.

Background:

Navy Sonar tests have been proven to have a negative impact on marine mammals.

Lifeforce has discussed operating policy with Nanoose Bay military representatives who stated that they have a policy that no tests are conducted when orcas are in the test area. There should be a written policy that includes all marine mammals. When tests are planned, expert marine mammal observers

should be on site and in communication with those who may have knowledge of the locations of orcas and other marine mammals.

9. Any Research/Film permit holders must not break any regulations as allowed under permit when pleasure boats are present.

Background:

Lifeforce has found that it is not always possible to enforce guideline when others are observed being allowed to break the guidelines under a research/filming permit.

10. "No Whale Watch Zones" must created in areas, such as Active Pass, where regulations cannot be adhered to or implemented in a safe manner. These areas should also provide sanctuaries for orcas to be able to have a break from continuous whale watching activity.

Background:

Lifeforce has found that whale watch companies do not follow the guidelines when pursuing orcas traveling through Active Pass. When you take the number of whale watch boats and add the ferries and pleasure the result is a chaotic, dangerous situation. Lifeforce photos show whale watch companies driving the orcas into the shore, blocking their route, chasing them and other inappropriate activities. Active Pass should be declared a No Whale watch Zone.

Great Barrier Reef Marine Park Authority has developed Codes of Practices. Their Management of vessels and aircraft not only looks at establishing additional whale and dolphin protection areas with seasonal or permanent restrictions but also looks at priority species, populations and individuals.

11. Land based whale watch programs, such as Lifeforce's Orca Trails, should be developed.

Background:

Lifeforce Orca Trails – Action Plan to prevent increase in boat activity

As a result of our ten-year study of Orcas, we can now develop "Orca Trails". We can advise park managers and the public when the orcas will pass by certain park areas. The public can call us for information about land-based whale watch areas so they can plan hikes, camping trips and other types of outdoor recreation. Lifeforce will help protect marine ecosystems and the orcas by promoting ecologically friendly outdoor lifestyles for land lovers and boaters.

12. All volunteer and government Marine Wildlife Rescue activities should be coordinated.

Background:

Lifeforce Marine Wildlife Rescue – Recovery Strategy/Action Plan

A fully equipped Marine Wildlife Rescue Trailer will be used as part of a coordinated effort with stranding networks and others to protect marine wildlife. When necessary, we would help provide care for them to be rehabilitated and, when appropriate, returned to their natural home in the wild. Lifeforce provides a 24-hour service to respond to marine wildlife injury, sickness, abandonment, stranding and other emergencies. This service includes responding to pollution problems such as oil and chemical spills. In addition, we will remove dolphins, porpoises, pinnipeds and seabirds trapped in fishing nets.

Work includes conducting investigations of cruelty to marine wildlife, reporting illegal fishing activities, removing marine debris that can harm wildlife and conducting other relevant Lifeforce Marine Wildlife Rescue Programs.

Lifewatch boat would also be equipped to rescue marine wildlife. When necessary, we would help provide care for them to be rehabilitated and, when appropriate, returned to their natural home in the wild.

DFO states that regulations should require that the public must report animals that are injured entangled or stranded.

Lifeforce recommends that a formal network of groups that are involved with marine wildlife and other species be created. Contact information for these organizations should be available to the public.

This network could also bring their expertise to meetings on unique situations such as the Springer and Luna cases.

13. All Marine Wildlife Sighting Networks should be coordinated and standard data collection forms be used in order to monitor "Life processes and critical habitats".

Background:

There are several organizations conducting this work. There is the Lifeforce Whale and Dolphin Hotline, the Marine Mammal Research Group, the BC Cetacean Cetaceans Sighting Network, The Whale Museum Hotline and Orca Network

14. Marine Mammal Monitoring Standards and Enforcement Policy, such as those being developed by Lifeforce, should be used for training and operation standards for organizations that are monitoring boater's adherence to present guidelines and future regulations.

Background:

Presently there are four organizations conducting monitoring activities. Lifeforce' Lifewatch Boater Awareness Program, BC Park Warden System and Soundwatch have been conducting programs the longest while M3 and Straitwatch have operated for a couple of years.

Some of the public education has been conducted through Lifeforce's Orca Centre in Point Roberts and the Whale Museum in Friday Harbour. There is also the new Johnstone Strait Killer Whale Interpretive Centre

Lifeforce has been developing Monitoring Standards and has held a meeting with the above monitoring groups.

15. "Whale Watching" education materials should include site specific education information. Monitoring organizations should continue with their specific territories and educational materials for there areas.

This information could be distributed with a standard brochure that would represent all areas.

For example:

Whale Watching in Broughton Archipelago - Straitwatch/Robson Bight Monitors

Whale Watching in Vancouver and the Gulf Islands - Lifewatch (Lifeforce)

Whale Watching in Victoria - M3

Whale Watching in San Juan Islands- Soundwatch

Background:

The Whale Watch Guidelines that are distributed by Lifeforce includes illustrations and information about the commonly found marine mammals in Southern British Columbia and Washington. Our card is waterproof and is kept by boaters for longer periods as compared to temporary brochures and handouts.

The Hervey Bay Whale Watching brochure has excellent Distance Illustrations/figures that includes a separate one for aircraft

The Saguenay – St. Lawrence Marine Park regulations have separate Figure 1 "Behaviour to Adopt: Belugas and Other Endangered Species and Figure 2 Behaviour to Adopt: Whales other than endangered Species.

17. Marine Protected Areas (MPAs), such as Orca Pass that includes the Southern Gulf Islands and part of San Juan Islands, should be created for transboundary species and to protect vital marine ecosystems.

Background:

Lifeforce

Marine Protected Areas

The Lifewatch studies and data collection will help provide information in support of conserving habitat for species at risk. Our work would provide information about species distribution and behaviour that must be obtained in order to create Marine Protected Areas (MPAs).

We will work with Parks Canada who will be conducting feasibility studies regarding the recently announced Southern Gulf Islands National Park and National Marine Conservation Areas (one is the Southern Strait of Georgia). We are also in the working group to create Orca Pass – An International Transboundary Marine Sanctuary.

Our experiences will aid in determining which "highly protected core areas" should include No Whale Watch Zones and other zone that could include activities that coexist with efforts to protect marine ecosystems.

18. Marine mammals need clean habitats. Regulations should include "Green Boating" practises since pollution threatens marine wildlife.

Background:

Lifeforce was one of the original participants in the Green Boating group in Vancouver. This adhoc group discusses ecologically friendly boating practises such as the mandatory use of sewage pump out stations. This and other actions for clean water could be part of marine mammal protection regulations.

Conclusion

It is through responsible stewardship activities and strong regulations that whales and marine environments will be protected. Lifeforce hopes that individuals and businesses will take action that would provide cultural and economic benefits while saving threatened wildlife.

References

Lifeforce Foundation

lifeforcesociety@hotmail.com

Great Barrier Reef Marine Authority

www.gbrmpa.gov.au

Pacific Rim, National Park Reserve, Parks Canada

Hervey Bay Marine Park – Whale Watching and Monitoring Program

eddymay@net-lynx.net

Queensland National Parks and Wildlife Service

www.env.qld.gov.au

Saquenay-St. Lawrence Marine Park, Parks Canada

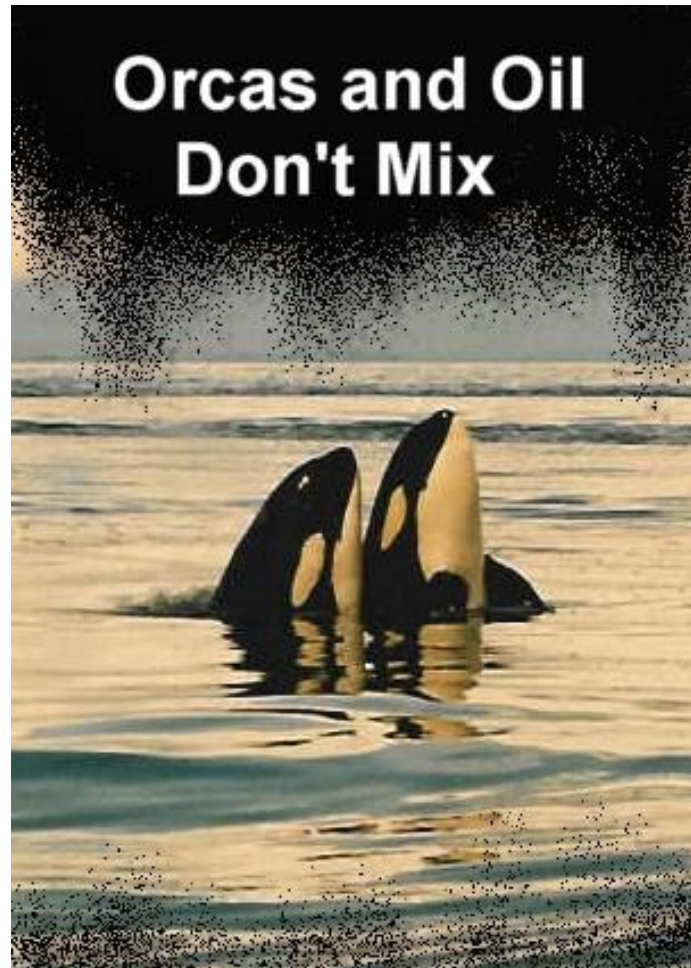
www.parcscanada.gc.ca

International Association of Antarctica Tour Operators

www.iaato.org

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“Oil and Chemical Resistant Whales, Otters and Birds?”



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**Lifeforce Foundation
March 2005**

“Oil and Chemical Resistant Whales, Otters and Birds?”

Peter Hamilton, Lifeforce Foundation

Introduction

Can endangered marine wildlife, such as whales, otters and birds, evolve to a biological state of being resistant to the harmful effects of oil and chemical contamination? No magic bullets on the horizon but essential methodologies can be developed to help wildlife “resist” travelling in polluted waters.

While some deterrents have been developed to scare birds out of polluted areas there is no consistent, permanent approach to protect these and other species because species-specific considerations must be explored further and volunteer availability must be permanent. Decisions to employ such methods should be based on species’ behaviour and designated to knowledgeable persons/organizations who have permanent standby status.

Employing sounds as “attractors” and “deterrents” can be implemented to protect all species that could be exposed. This would include endangered orcas. Populations of orcas in the Pacific Northwest are facing extinction as a result of human impacts.

First, methods must be developed and/or refined to be species specific. Secondly, there should be training and task designation. A WERT (Wildlife Emergency Response Team) should be part of the chemical/oil response efforts to prevent wildlife exposure. A committee of related organizations could organize the development of these programs. They must be contracted in order to be able to provide ongoing services. Funding may be stipulated under Federal legislation such as the Canada Shipping Act. Other funding sources could include company sponsorships.

Lifeforce Foundation Background

I founded the Vancouver-based Lifeforce Foundation in 1981 to raise public awareness of the interrelationship of human, animal and environment problems. I have studied the behaviour of numerous species and have published papers on enriching the environments of captive animals.

For over two decades Lifeforce has been campaigning to protect orcas such as the endangered Southern Orca Community. In 1982 we helped stop the last capture attempt at Peddar Bay, BC. An estimated 48 orcas were taken from the Southern Community in the late 60s and 70s. These captures not only have resulted in the loss of the 48 orcas but has also created a very low birth rate. The abnormal age and sex ratio will take decades to return to normal.

For the past 12 years, Lifeforce has been conducting a monitoring program called Lifewatch Boater Awareness Program. We distribute whale watch guidelines to boaters and report violations to the authorities.

I have studied the behaviour and travel patterns of the Southern Community under a Canadian Department of Fisheries and Oceans (DFO) research permit. Based on my

research Lifeforce has developed “Orca Trails” to promote land-based whale watching. We can notify Marine Park Managers when the orcas are expected to pass by.

In 2002, Lifeforce worked with government researchers to help prevent any harm to orcas when seismic tests were conducted in the San Juan Islands and BC. Lifeforce advised the researchers when the orcas and other marine wildlife would be close to the test sites. The researchers would then shut down the underwater air guns. The US team contacted Lifeforce every day in order to determine the location of the orcas. They would then choose test sites where they would not be near the orcas.

The ongoing accidents involving oil spills reinforces the need for immediate emergency plans to protect the endangered orcas travelling in these waters. The Lifeforce Foundation has been developing methodology to protect orcas and other wildlife from these life-threatening hazards.



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Cherry Point, WA

Oil Spill History

On June 26, 1999, I was in Point Roberts, WA when some orcas passed by. It was all of J and K pods. The next morning the media reported an oil spill at Cherry Point where the orcas were heading. The Arco Texas had spilled 300 gallons of crude oil from Valdez, AK. Most of the oil had spread north towards Point Whitehorn, WA and Boundary Bay, BC. When I heard about the spill location I thought that it was highly likely that these orcas went right through it because they frequently take Rosario Strait when they head south. Unfortunately, they did pass through the oil spill area. I confirmed that the orcas were in Rosario Strait the next morning.

One exposure to oil and other such hazards could result in long lasting health problems and/or fatalities. The 2000 orca census found historic low numbers in J and K pods that could have been associated with this 1999 exposure. Shocked that there were no plans in place to prevent such a tragedy, I started looking at possible methods to "warn" orcas of such dangers.

An oil or chemical spill could affect a major part of the home ranges of marine wildlife. There have been several accidents in the Southern Georgia Strait that is a temporary home range of endangered orcas.

When the Exxon Valdez oil spill first occurred, an orca pod was seen surfacing in the oil slick. In 1988, this AB pod consisted of 36 members. 14 were missing over the following three years, down to 22. The orcas probably died from inhaling the oil and were sickened from eating oil-coated prey.

From 1995 to 2003 there have been nine oil spill hazards in the Cherry Point/Ferndale and Rosario Area (as listed in Washington Oil Spill Resource Damage Assessments 1991 to 2003). On December 30, 2003 there was a large oil spill in Puget Sound. There was approximately 4800 gallons of heavy fuel oil accidentally dumped in Puget Sound near the Chevron facility in Point Wells. Since then, two other spills have occurred in October 2004 and January 2005.

There are reports of numerous other “minor” accidents. For example, on June 6, 2000 at 11:45 AM the “Axios” spilled an undisclosed amount of hydraulic oil as reported by ARCO at Cherry Point. J pod was present. I was with J2, “Granny”, at the site at approximately 12:32 PM.

Methods to Alter Courses

Over the years, both planned and serendipitous events have led me to believe that it is possible to use benign, low-level sounds to attract cetaceans. In so doing, I could alter their courses to direct them away from environmental hazards.

Lifeforce has been conducting field studies utilizing existing, refined and new methods discovered through our previous wildlife protection work and scientific literature searches. Sounds, that attract animals to them and that deter animals away from them, are being explored.

Some of the methodologies can also be applied to terrestrial animals that are vulnerable to exposure to oil and chemical spills.

During one Lifeforce test the orcas were heading south and, when they heard our playbacks of orca communication, all three pods dramatically reversed direction to head north towards the sound source. They continued to travel north even when the sounds were turned off.

On another occasion, when a researcher was recording orca communication he accidentally played back the recordings and the orcas rushed towards his boat.

Lifeforce is hoping to complete studying these methods and implement our findings during emergency situations over the next few years. We hope to coordinate our programs with government, business, NGOs and others who are trying to protect marine wildlife.

Expected benefits to the environment

The Lifeforce studies directly benefits orcas and other wildlife that could be exposed to oil spills and other environmental hazards. Our work contributes to efforts to protect marine ecosystems for all life. Orcas are high on the food chain and are bio-indicators of marine pollution – both orca and human survival is interrelated.

Studies have placed polychlorinated biphenyls (PCBs) levels in orcas of the Pacific Northwest as among the highest measured in marine mammals anywhere in the world. Toxic chemicals can affect their growth, reproduction and immune systems.

In orcas, studies have shown that adult females may transfer up to 90 percent of their PCBs and other contaminants, such as DDT, to their first-born calf. This most likely causes major harm to the female orcas' reproductive cycles as well as young orcas' development.

In a 2004 study by Dr. Peter Ross, DFO, 23 chemicals, mainly pesticides, were listed that could have effects similar to those of PCBs. One of the most common is 2,4-D, which kills dandelions.

Study Activities

Lifeforce would:

1. Develop and/or refined methods to be species specific in order to prevent wildlife contact with contaminants.
2. Work with individuals, organizations and government to determine species-specific behaviours.
3. Work to resolve any industry related conflicts to preserve wildlife habitats.
4. Continue to have discussions with oil spill response companies regarding task designation in the event of any oil/chemical spill(s).
5. Provide any training (written and/or verbal) that is necessary to perform all such wildlife protection work.
6. Work with BC Ministry of Water, Land & Air Protection, Canadian Wildlife Service and all other related government response agencies to be part of the chemical/oil response efforts for the protection of species at risk.
7. Conduct field studies as follows:
 - a) Determine if sound deployment could be used as a conservation tool to remove terrestrial wildlife from contaminated areas.
 - b) Determine if sound deployment could be used as a conservation tool to prevent exposure of threatened fish stocks to contamination/prey.
 - c) Determine if sound deployment could be used as a conservation tool to reduce any bird and waterfowl exposure to hazardous spills.
 - d) Continue to develop innovative methodology to reduce the harm to orcas caused by anthropogenic activities. Lifeforce proposes to look at the responses from *Orcinus orca* to safe levels of novel sound stimuli. The purpose is to:
 - i. Determine if benign, novel sound stimuli can be used to alert and/or change the direction of endangered orcas to stop exposures to hazards such as oil/chemical spills.
 - ii. Determine if lone orcas can be reunited with the family pod by using methodologies such as lead sound signals.
8. Gather data for a report on the development and applications of the methodologies. This will include photograph and video documentation.

Conclusion

Methodologies can and must be developed to be species specific. These techniques to prevent wildlife exposure to oil and chemical spills can be applied to both marine and terrestrial species.

A WERT (Wildlife Emergency Response Team) should be part of the chemical/oil response efforts. This team would be trained and be responsible for designated tasks. They will deploy humane attractors and deterrents to prevent wildlife exposure.

The WERT and the development of prevention methods could be organized by a committee of related organizations. All participants would be contracted in order to maintain a permanent WERT. Funding may be stipulated under Federal legislation such as the Canada Shipping Act and/or money could be provided through company sponsorships. The onus must not be on the WERT to raise donations because the responsibility lies within the government and responsible businesses.

Faced with the lack of action and funding opportunities, Lifeforce is concerned that orcas and other wildlife are being treated as if they were resistant to oil and chemical spills. I helped lobby the Canadian and US governments to designate orcas as being endangered. In view that orcas are facing extinction, I hope that there will be immediate, direct action to protect them and other marine wildlife.



© Lifeforce/Peter Hamilton

Cherry Point, WA

Donations Gratefully Accepted and Acknowledged

Lifeforce would gratefully accept donations and sponsorships towards equipment, operating costs and field studies.

Financial support could be acknowledged in many exciting ways. This would include signage on our research vessel and/or on our wildlife rescue unit. Lifeforce supporters would also receive a lot of great publicity through media coverage of our programs.

Please Contact:
Peter Hamilton, Lifeforce Foundation
Box 3117, Vancouver, BC, V6B 3X6
(604) 669-4673
lifeforcesociety@hotmail.com

We all know that it will happen again.
We all know that we must be prepared.
Whales, otters and birds are not resistant
to oil and chemicals.
Simply put:
Orcas and Oil Don't Mix.



© Lifeforce/Peter Hamilton

Boat Traffic Threats to Southern Resident Killer Whales (*Orcinus orca*): A Model Whale Watching Plan for Endangered Orcas



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February 2005
Lifeforce Foundation
lifeforcesociety@hotmail.com

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Introduction:

Boat Traffic Threats to Southern Resident Killer Whales (*Orcinus orca*):

A Model Whale Watching Plan for Endangered Orcas

Boat Traffic Threats

Whale watching can be a peaceful experience but presently it a threat to the Southern Community. The J, K and L pods in this community are designated as an endangered species. Many boaters are unaware of "Whale Watching" guidelines. Lifeforce distributes the guidelines to boaters on the water and to the general public. The information advises pleasure boaters, commercial boaters, jet skiers and seaplane operators how to safely watch whales and other marine life. Lifeforce helps stop boaters who inadvertently or intentionally harass marine mammals.

Threats to the Southern Community such as dwindling food sources and environmental pollution will not be resolved immediately but we can immediately reduce some of the threats through enforceable boating regulations. By controlling the boat traffic we can immediately reduce noise pollution/boat traffic that interrupt foraging patterns and cause stress that affects the immune systems. We can also stop/reduce boat collisions that could injure and kill orcas.

A major change in boat-based whale watching is essential for the survival of orcas. There is an urgent need for strong regulatory measures to ensure it. This population is extremely vulnerable to human and environmental threats.

A Model Plan: Whale Watch Zones

Guidelines and regulations regarding whale watching activities worldwide have been reviewed and outlined in our recommendations for Marine Mammal Regulations, 2004 (Appendix I). The best rules that are applicable to whale watching on the BC/WA West Coast can be used to form a model plan for ecotourism businesses to watch orcas and other wildlife.

This discussion paper looks at changing the face of present whale watching activities. It would replace the haphazard, prolonged presence of commercial boats with organized Whale Watching Zones and No Whale Watching Zones in the present high traffic areas. This would, in turn, reduce many of the copycat behaviours by pleasure boaters who mimic improper boat operations by the whale watch companies.

Whale Watch Zones: Water and Land

On the Water

The travel patterns of the Southern Community are very predictable and would support the creation of designated water zones for whale watching. These Whale Watch Zones would be marked by GPS and land coordinates. The zones would be approximately 2 miles apart. Commercial boats would wait within the zone for the orcas. The number of boats would be limited and the number of zone visits restricted.

On Land

The plan that would also incorporate land-based whale watching through Lifeforce's Orca Trails program.

No Whale Watch Zones

No Whale Watch Zones must designated in all areas where regulations cannot be adhered to and in high boat traffic areas where navigation cannot be conducted in a safe manner. These areas should also provide sanctuaries for orcas to be able to have a break from continuous whale watching activity. No Whale Watch Zones would prohibit both commercial and pleasure craft.

Conclusion

This model would also incorporate Ethical Eco Tourism Standards by training and licensing operators. The implications of keeping dolphins in swim-with and petting programs should also address any impact on watching dolphins in the wild (see "Monitoring Issues in BC and WA: Friendly Persuasion and Aquarium Pets?", Appendix III)

Lifeforce hopes to work with others to develop this model. Lifeforce has been monitoring this problem for 12 years in order to form this basis for discussion. Further work will help refine this model plan that could be used by ecotourism businesses operations throughout the world.

Training and Licensing

Boat Operators

Whale Watch Companies and other related ecotourism businesses (including companies using aircraft) must pass a compulsory written test in order to receive an annual License/Permit to Operate. Inspections will determine if they are in violation of permits and are subject to suspension or cancellation.

Boat Nature Interpreters

All staff must be trained. Training should include safe boating competency testing and knowledge of marine wildlife behavior. Educational material should include materials such as Lifestorce's Orca Field Guide.

Eco Certification

Whale Watch Companies will display an [Ethical Certificate of Operation](#). This seal of approval would appropriately be a "Whale of Approval"

Whale Watch Zones

The creation of designated water zones for commercial whale watching would be marked by GPS and land coordinates. The zones would be approximately 2 miles apart. The zones would be ¼ mile off shore. Commercial boats would wait within the zone for the orcas.

The following is a list of possible Whale Watch Zones. Numbers 1 to 19 are the same as the Operators' List that they use to give locations of orcas to each other. The others are locations recommendations by Lifestorce for areas not presently on the companies' lists.

Operators' Location List (A selected number of locations would be allowed)

Haro Strait to Rosario Strait - Maps 2 and 3b

- 1 – East Point
- 2 – Monarch Head
- 3 – Blunden Island
- 4 – Mouat Point
- 5 – Active Pass (south Entrance)
- 6 – Turn point
- 7 – Kellet Bluff
- 8 – Kelp Reef
- 9 – Lime Kiln Lighthouse
- 10 – False Bay
- 11 – Eagle Point
- 12 – Salmon Bank
- 13 – Iceberg Point
- 14 – Colville Island
- 15 – Bird Rocks
- 16 – Strawberry Island
- 17 – Lawrence Point
- 18 – Village Point
- 19 – Turn Island

Other Lifestorce recommended locations

Haro Strait to Rosario Strait – Map 3a

- 20 - Patos island to Rosario
- 21 - Alden Bank
- 22 - Lummi Island
- 23 - Birch Bay

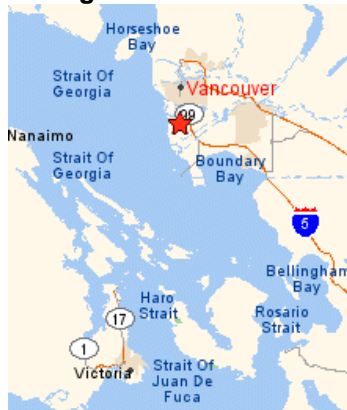
Georgia Strait/Vancouver Area – Map 2

- 24 - Boundary Bay
- 25 - Coal Port/Sturgeon Banks
- 26 - Mid Georgia Strait
- 27 - South Arm Fraser River
- 28 - Iona Jetty
- 29 - North Arm Fraser River
- 30 - Bowen Island
- 31 - Porlier Pass

Victoria/Sooke Area – Map 4

- 32 - Trail Island
- 33 - Discovery Island
- 34 - To be discussed
- 35 - To be discussed
- 36 - Race Rocks (or No Whale Watch Zone)
- 37 - To be discussed

Map 1 – Southern Community Whale Watching Area



WHALE WATCH ZONES

Map 2 – Georgia Strait/Vancouver Area



WHALE WATCH ZONES

Maps 3a and b – Haro Strait to Rosario Strait



WHALE WATCH ZONES

Map 4 – Victoria/Sooke



Approaching Whale Watch Zones

Operators should not be within 2 miles of any orca activity. To further reduce boat traffic congestion travel to zones must be taken utilizing routes not in view of whale watch activities and not taken by the orcas. All operators must allow enough time to reach and/or proceed to a designated zone(s).

Time Limits

Commercial and recreational vessels must be restricted by both number of boats and time allowed on scene. When they are waiting in designated zones the time could vary depending on the arrival of the boat followed by the orcas.

During any unexpected chance meeting, the maximum time for being in the presence of orcas should be 30 minutes.

In addition, when pleasure boats are present commercial vessels must stand down until the pleasure craft can be advised of this safe boat operating procedures. They would be advised by organizations conducting monitoring activities.

Number of Boats

The maximum number of commercial whale watch boats in any Whale Watch Zone shall be 10 vessels. It may be less if boats will be within the allowed proximity of the orcas. When this number is reached then other boats shall proceed to the next Whale Watch Zone.

Since pleasure craft operators may follow commercial operators the number may exceed the commercial quota as long as the boats do not impede the movement of orcas and/or violate any rules.

Maximum Number of Zones per Trip

The maximum number of zones attended by any one company shall be two zones for each trip.

Maximum Number of Boat Trips per Day

The maximum number of boat trips per day per boat shall be two.

No Whale Watch Zones

No Whale Watch Zones must be created in all areas where regulations cannot be adhered to and in high boat traffic areas where navigation cannot be conducted in a safe manner. These locations should also provide sanctuaries for orcas to be able to have a break from continuous whale watching activity. The areas would include in Canada - Active Pass (Map 5) and in the US - President's Channel area; Speiden Channel area; and Southern San Juan Channel area (Map 6). No Whale Watch Zones would prohibit both commercial and pleasure craft.

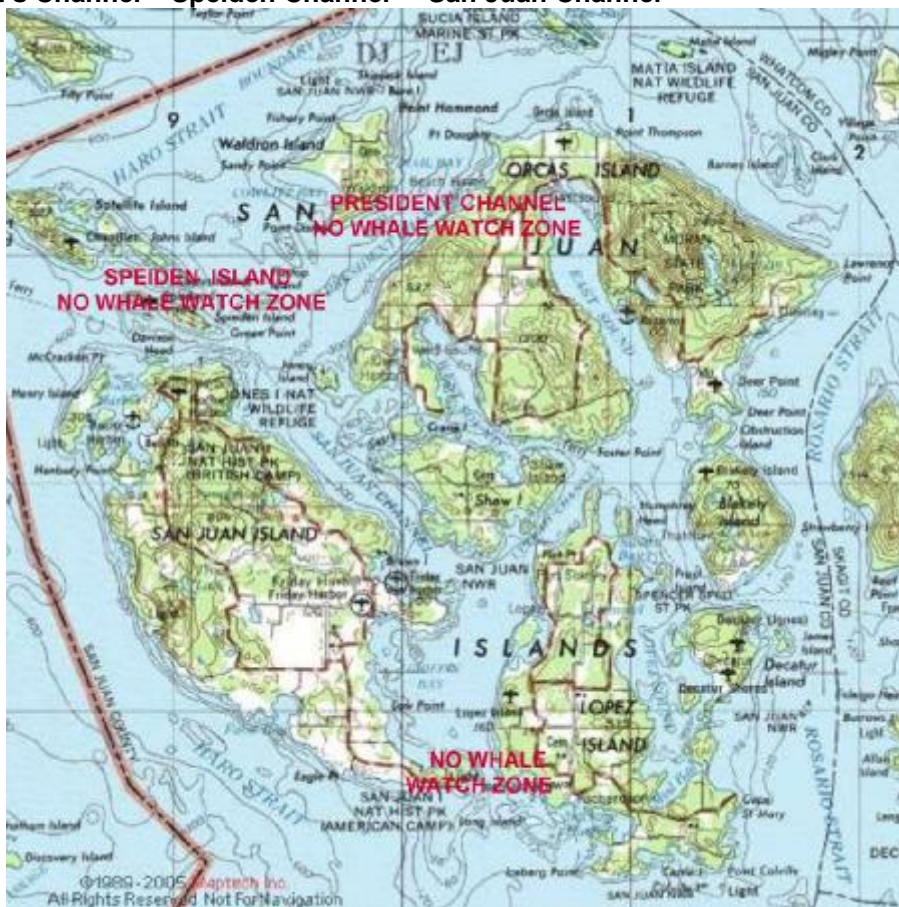
NO WHALE WATCH ZONES

Map 5 – Active Pass



NO WHALE WATCH ZONES

Map 6 – President's Channel – Speiden Channel – San Juan Channel



Marine Wildlife Monitoring

Marine Mammal Monitoring Standards and Enforcement Policy, such as those being developed by Lifeforce, should be used for training and operation standards for organizations that are monitoring boater's adherence to present guidelines and future regulations.
(See Model Monitoring Standards - Appendix IV)

Company Logs

All companies must provide Weekly Marine Wildlife Reports when requested by authorized agencies. This would include information from the number of trips to species encountered.

Violations

All violations by commercial and pleasure boaters shall be reported by whale watch companies and others immediately to appropriate authorities.

Land-based Whale Watching: Orca Trails

A land-based Orca Trails Program should be developed. Lifeforce is conducting a project called Orca Trails Whale Watching. This is a unique education program to promote land based whale watching in BC and Washington State. We hope that this will help manage potential increases in boat activity.

Orca Trails is a result of our twelve-year study of orcas. We can advise park managers and the public when the orcas will pass by certain park areas. The public can call us for information about land-based whale watch areas so they can plan hikes, camping trips and other types of outdoor recreation. Lifewatch will help protect marine ecosystems and the orcas by promoting ecologically friendly outdoor lifestyles for land lovers and boaters.

As part of this program we will also look at the possibility of using boats to take people to the parks. Any such boat traffic would not come into contact with the orcas. Marine Parks could incorporate drop off points and various types of tourism related businesses and park programs could be developed.

In marine parks any existing moorage could be utilized for the combined nature hikes and orca watching – non-invasive wildlife experiences.

Appendixes

Appendix I – Marine Mammal Regulations (Previously recommended by Lifeforce)

Appendix II - Company Recording Procedures (Required information to be discussed.)

Appendix III - List of Agencies Monitoring and Responsible for Violations
To be added.

Appendix IV - "Monitoring Issues in BC and WA: Friendly Persuasion and Aquarium Pets?" *Abstract: As we all seek the best management approaches to ecotourism and recreational activities the Lifeforce Foundation raises the questions "Should education programs include friendly persuasion to reduce harmful boat traffic?" and "Are the captive dolphin programs instilling speciesist attitudes towards dolphins in the wild?"*

Appendix V – Model Monitoring Standards

Subject: [Fwd: Proposed Critical Habitat for Southern Resident]

From: "Bob Lohn" <Bob.Lohn@noaa.gov>

Date: Mon, 10 Jul 2006 07:55:22 -0700

To: orcahabitat.nwr@noaa.gov

Forwarded for the record.

Bob

----- Original Message -----

Subject: Proposed Critical Habitat for Southern Resident

Date: Sun, 9 Jul 2006 11:44:38 -0700

From: Lifeforce Foundation <lifeforcesociety@hotmail.com>

To: Lifeforce Foundation <lifeforcesociety@hotmail.com>, <orcahabitat.nwr@noaa.gov>, <Bob.Lohn@noaa.gov>

To: Chief of Protected Resources and Bob Lohn

Orcahabitat.nwr@noaa.gov <<mailto:Orcahabitat.nwr@noaa.gov>>

From: Peter Hamilton, Lifeforce Foundation, lifeforcesociety@hotmail.com
<<mailto:lifeforcesociety@hotmail.com>>

*Re:** Proposed Critical Habitat for Southern Resident
Killer Whales***

1. Distribution of the Southern Community

Lifeforce has studied the behaviour and travel patterns of the Southern Community for over 10 years. As part of this work I have looked at important critical habitats. This would include Pt. Grey to Boundary Bay to White Rock (with Birch Bay to Rosario Strait in US) and Bowen Island to Porlier and Gabriola Passes (with Boundary Pass in the US).

In 2005 and 2006 the Southern Community have spent more time in waters from Pt. Grey to Rosario and, sometimes, Boundary Pass. They are turning more often to stay in these areas. In 2005 they past Pt. Roberts 4 times on two different days. They are spending time for all of their life activities such as foraging, resting and socializing.

We have not published our data in order to give the orcas a break from Whale Watch Companies, Pleasure Boaters and some Research Vessels. We can supply data to support our recommendations that these areas be included as "critical habitats".

* *

2. Threats

Oil and Chemical Spills

Lifeforce has been developing methods to attract orcas away from environmental hazards. In addition to much needed Oil Spill Response Plans, this area should be a priority "critical habitat" since the Southern Community has already been exposed to oil spills off Cherry Point, WA.

Please see Lifeforce's "Oil and Chemical Resistant Whales, Otters and Birds?".

Whale Watching

Boat traffic monitoring is very important. The Lifeforce "Lifewatch Boater Awareness Program" has covered these areas except in 2006 as funding was not available. We continue to provide a Whale and Dolphin Hotline and provide guidelines in these areas for the over 13 years.

For further information about No Whale Watch Zones, Whale Watch Zones and other

recommendations that can be applied to critical habitat issues please see Liferforce's "A Model Whale Watching Plan for Endangered Orcas" and "Marine Mammal Regulatory Amendments and Management Plans".

Permit Close Approaches

No activity that interrupts the lifestyles and/or cause stress and pain should be permitted in critical habitats. This would include attachment of instruments and biological sampling.

Alternatives to prey sampling must be implanted to stop haphazard close approaches. Sometimes the behaviour is socializing not foraging that is broken up by boats speeding in on them or conducting "focal follows"..

Commercial Photographers

There is an abundance of orca photos available and further close approaches should be prohibited in critical habitats.

"Research" Photographers and Research Activities

The amount of time spent, duplication and other methods to obtain census (such as land base counts) should be evaluated when permitting ID photos. Organizations purporting to be "research" when they are conducting whale watch tours should not be allowed to do close approaches in critical habitats.

There are three research projects that involve close approaches or "focal follows". This adds to the know threat of stress/injury and constant interruption of the orcas' lifestyles due to boat traffic.

3. Action Planning

1. Actions should include developing responses to environmental hazards such as oil and chemical spills.
2. The dumping of raw sewage by Victoria must be stopped. The sewage contains PCBs and many more contaminants. The sewage is dumped into the identified critical habitat for the Southern Community and transients.
3. Vancouver sewage treatment must be improved. Presently low-level treatment of sewage is being release into orcas' critical habitat at the Iona Beach Jetty.
4. Commercial fisheries must be "educated". For example crab boats off Sturgeon Banks should shut down when orcas are present. They do not follow the guidelines.
5. Delta Container Port expansion plans will impact on the orcas' critical habitat. Their present cargo ships should not dock when orcas are passing.
6. Westshore Terminals boat traffic should not dock when orcas are present. They must not empty their bilges that could include oil and other pollutants.
7. Cherry Point traffic should not dock when orcas are present.
8. Active Pass should be closed to commercial whale watching. When possible, BC Ferries should wait until the orcas have left Active Pass before entering.

Oil and Chemical Resistant Whales Final.pdf

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ModelWhaleWatchPlan.pdf

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MarineMammalRegulationsFinal.pdf	Content-Type: application/pdf Content-Encoding: base64
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Subject: Further Information - Proposed Critical Habitat for Southern Resident

From: "Lifeforce Foundation" <lifeforcesociety@hotmail.com>

Date: Mon, 24 Jul 2006 14:35:54 -0700

To: "Lifeforce Foundation" <lifeforcesociety@hotmail.com>, <orcahabitat.nwr@noaa.gov>, <Bob.Lohn@noaa.gov>

To: Chief of Protected Resources and Bob Lohn

From: Peter Hamilton

In addition to our comments submitted below I would like to add another point to our Action Planning. Orcas frequently travel in areas with high BC Ferry traffic. Some of the ferry routes cross into US waters. Although the Canadian Government will be implementing new sewage dumping regulations many of the BC Ferries cannot meet the requirements. BC Ferries is thinking that they could dump their wastes into the Greater Vancouver Regional District system but this is only a primary treatment site (see #3 – Action Planning) and would not solve the problem unless the fees paid would upgrade the treatment facility.

BC Ferries should stop all dumping of sewage when orcas are in the area or will be entering their disposal areas.

In additional, similar restrictions should be applied to WA State Ferries and vessel traffic (including pleasure crafts) in US waters. Please see Press Release below.

Peter Hamilton

News Release

July 24, 2006

Sewage Dumping Banned, New Laws Protect Our Coastal Waters

PORT MOODY - MP James Moore, Parliamentary Secretary for the Pacific Gateway, announced new regulations by the Conservative Government that will protect Canada's coastal waters from sewage, garbage, oil and other pollutants. Among the regulations is a complete ban on the dumping of untreated sewage from all boats and ships along Canada's coastal waters. "This really is a great leap forward in new laws that will protect the beauty of our coasts, clean our waterways, and defend our environment," says Moore.

The regulations cover a wide variety of issues intended to reduce or eliminate pollution by oil, chemicals, sewage, garbage, anti-fouling paints and air emissions from ships. Some of the main provisions are:

§ An absolute ban on the dumping of untreated sewage within 3 nautical miles of Canada's coasts for pleasure craft and small ships (less than 400 tons)

§ An absolute ban on the dumping of untreated sewage within 12 nautical miles of Canada's coasts for large ships (larger than 400 tons)

- § A requirement for new oil tankers to be double-hulled and existing oil tankers to be phased-out
- § A requirement for ships to fit oily water filtering equipment to prevent harmful discharges of oily bilge water
- § A requirement for record-keeping for operations involving oil, chemicals, sewage or garbage
- § A requirement for ships to be surveyed and certified that they meet construction and equipment requirements relating to oil, chemicals, sewage, air emissions and anti-fouling paints.
Penalties for violating these new laws include possible fines of \$250,000 to \$1,000,000, or jail time of up to 3 years. "Canada has over 202,000 kms of coastline that deserve the best possible protection. These are effective and tough regulations that will help keep our coasts clean," says Moore.
Belcarra Mayor Ralph Drew, who has called for these new regulations for years, is applauding the news. "Belcarra Council is very pleased that the Federal Government is pursuing these progressive measures to protect the marine environment. Belcarra residents have wanted to see these measures implemented for many years to protect the unique deep-water fjord of Indian Arm."
Concluded Moore, "All Canadians cherish our environment and these new regulations will serve to protect the beauty of Canada's coasts."

-30-

For more information, email moorej0@parl.gc.ca or call 613.992.9650

To: Chief of Protected Resources and Bob Lohn
Orcahabitat.nwr@noaa.gov

From: Peter Hamilton, Lifeforce Foundation, lifeforcesociety@hotmail.com

Re: Proposed Critical Habitat for Southern Resident Killer Whales

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Please see Lifeforce's "Oil and Chemical Resistant Whales, Otters and Birds?".

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Boat traffic monitoring is very important. The Lifeforce "Lifewatch Boater Awareness Program" has covered these areas except in 2006 as funding was not available. We continue to provide a Whale and Dolphin Hotline and provide guidelines in these areas for the over 13 years.

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